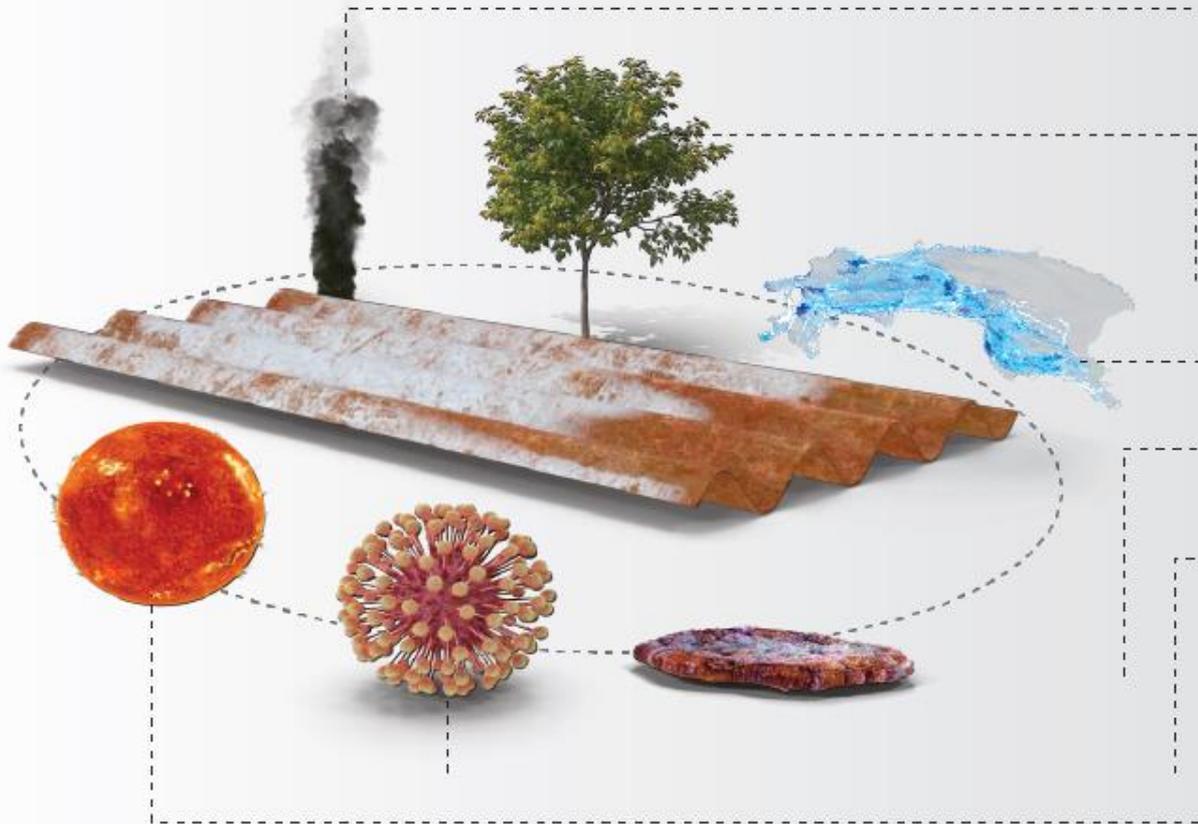




Materials age because of a combination of factors, leading to the transformation of their molecular structure.



Environmental pollution

Resins, bird droppings

Water

Organic & inorganic elements

Bacteria and Germs

Temperature & UV-A/B radiation

Cleaning is not enough!

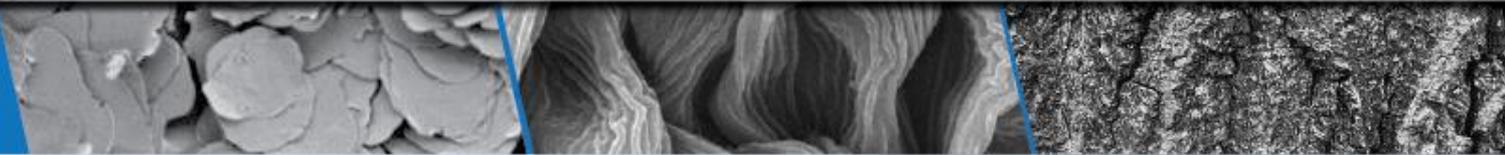
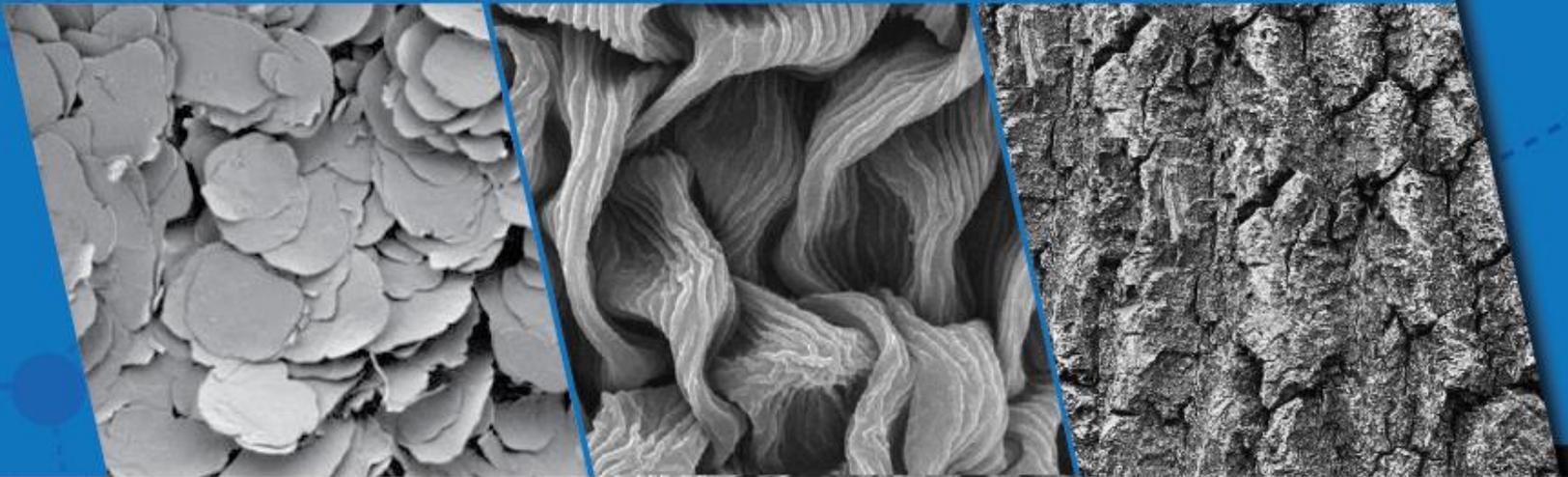
The elements (contamination) enter the depth of the capillary structure. Especially bacteria and water. Over time, these cracks are filled, and the object loses its luster, since the refraction of light is different; A loss of gloss is noticeable and surfaces become opaque.

The normal cleaning process can not penetrate the capillary structure unless mechanical methods (sanding, polishing) or more aggressive chemicals are used. This leads to an accelerated deterioration of the material.

• Painted metal

• plastic

• wood



DEFENDER·N is Protective!



The **DEFENDER·N** principle is similar to a protective layer for a cell phone: an invisible barrier is used to protect the object from damage.



Silicium (Si14)

Silicium is the main component of sand and glass. Resistant to most acids.



Si

Titanium (Ti22)

Titanium is a metal very resistant to corrosion by sea water & other elements.

Used in aerospace applications.



Ti

How does DEFENDER-N work?

DEFENDER-N has been inspired by nature: it combines the protective layer of the lotus flower with the adhesion forces of the gecko (Vander Waals intermolecular forces), using two very strong natural elements: silicium and titanium!

Nanotechnology

The manipulation of matter at the nanoscale. Used by DEFENDER-N to create a bond between the atoms of a mineral and a metal.



Plastic
Polyethylene, Acrylic, Vinyl
Polychloride



Glass
Colorful, monolithic,
laminated, floated, with
glazing chamber & matte



Rubber
Neoprene, butyl, ethylene,
propylene



Stone
Bricks, Natural stones,
varnished or treated, as
well as in marble



Wood
Hardwood, semi-hard, soft,
painted, varnished, multi-
laminated, laminated



Metal
Aluminum, iron, copper,
stainless steel



Cars & Trucks

Painting

Protection against lime stains, asphalt, bird droppings, tree resins, UV radiation, light scratches.

Glasses & Crystals

Protection against water spots with hydrophobic effect.

Headlights

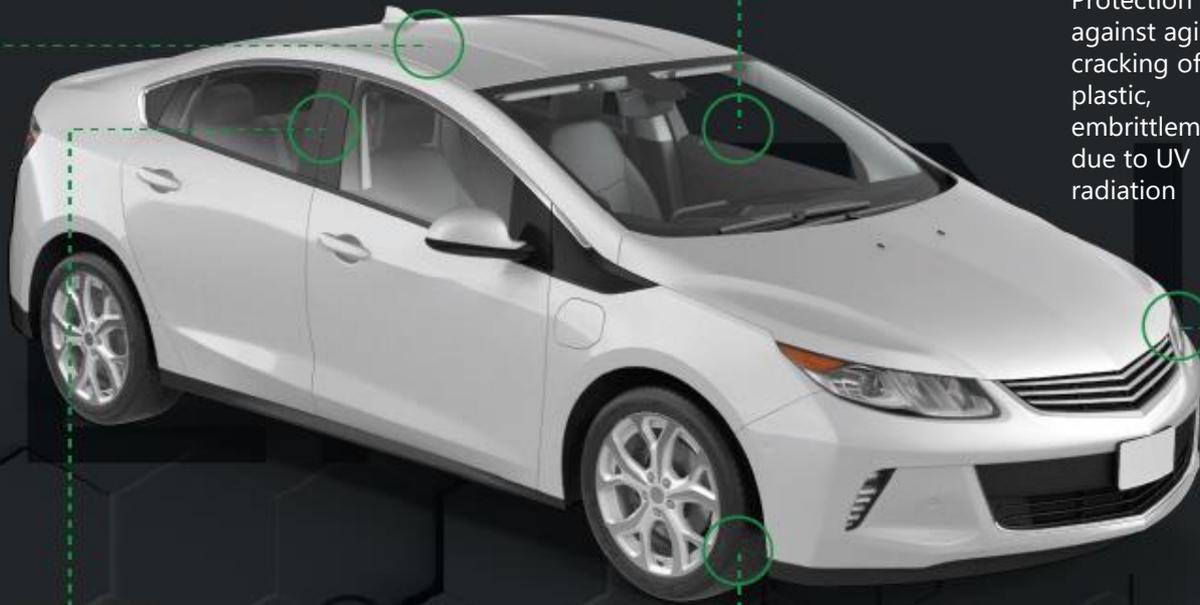
Protection against aging, cracking of plastic, embrittlement due to UV radiation

Plastic Products

Protection against yellowing, cracks in plastics, stains from cosmetics and sunscreen, development of fungi and bacteria

Wheels & Tires

Protection against brake dust, burns on light alloy wheels



Yachts & Boats

Glasses & Crystals

Protection against saltwater stains, fading.

Teak & Wood

Protection against aging, cracking, grease stains, wine, sunscreen.

Swimming Pools, Jacuzzi & Bathrooms

Protection against yellowing, cracks in plastics, stains from cosmetics & sunscreen, development of fungi and bacteria..

Hull

Protection against saltwater, stains, sun discoloration.

Mechanical parts

Protection against algae, rust oxidation on internal and external parts.



to protect



DEFENDER·N
smart technology to protect

Automotive



A product for many applications!

DEFENDER·N has many areas of application, due to its versatility. It can be applied in marine vessels, transport systems, aircraft, commercial buildings, residential, industrial solutions and much more.

Aerospace

Marine

Buildings

Hospitals

Industry



DEFENDER·N
smart technology to protect

**CERAMIC
COATING**

DEFENDER·N
smart technology to protect

**CONCENTRATE
COATING**

DEFENDER·N
smart technology to protect

**MAINTENANCE
COATING**

APPLICABLE TO THE FOLLOWING SURFACES:



APPLICABLE TO THE FOLLOWING SURFACES



...EMOLD, VEHICLE, MARITIME, POOLSPA



CERAMIC

Purpose: Protects any solid material against deterioration from water, heat, UV radiation, bacteria, corrosion, acids, etc.

Mixture: Solution ready-to-use 32 oz (1 liter) covers up to 1,000 ft² (approximately 100 m² or 10 cars).

Durability: Protection 3 to 5 months.

Instructions:

- 1.- Clean the surface perfectly, removing any type of contamination. Make sure the surface is completely dry.
- 2.- Apply 2-3 mists of Pro Coating Ceramic to the surface from left to right and right to left. Make sure the surface is completely covered with the product
- 3.- Light wipe with a microfiber towel if the surface is non-porous. If the surface is porous, let the product dry

Note: For best results, let the surface cure for 30min before exposing to water or applying a second application, however if the surface is porous, then let the surface cure for 12-24 hours before exposing to water or applying a second application. Additional applications will increase the shine on nonporous surfaces.





CONCENTRATE

Purpose: Protects any solid material against deterioration from water, heat, UV radiation, bacteria, corrosion, acids, etc.

Mixture: Highly concentrated for large scale application 32 oz (1 liter) covers up to 10,000 ft² (approximately 1,000 m² or 100 cars).

Durability: Protection 1 to 3 months.

Instructions:

1.- Mix Concentrate with water. 2oz of Concentrate for 32oz of water (50ml of Concentrate for 1000ml of water)

2.- Clean the surface perfectly, removing any type of contamination. Make sure the surface is completely dry.

3.- Apply 2-3 mists of Pro Coating Ceramic to the surface from left to right and right to left. Make sure the surface is completely covered with the product

3.- Light wipe with a microfiber towel if the surface is non-porous. If the surface is porous, let the product dry

Note: For best results, let the surface cure for 30min before exposing to water or applying a second application, however if the surface is porous, then let the surface cure for 12-24 hours before exposing to water or applying a second application. Additional applications will increase the shine on nonporous surfaces.

Shelf life of the product after being mixed is approximately 15 days.



THE TECHNOLOGY BEHIND

DEFENDER·N | CERAMIC

DEFENDER-N Ceramic is made from two of the most common elements in the world: silica and oxygen. We have invented a "liquid crystal" with Defender-N. This element is used in optical fibers and in spatial applications. The innovation is based on the manipulation at a molecular level: this provides more resistance.

Our laboratory has "braided" the silica molecule itself, similar to the braiding of a maritime rope: Individual fibers may not be that strong to resist high tension forces, but together in a braided form (as we have developed) the braided rope holds a ship securely to the dock.



Especially resistant to:

Saltwater



Heat



Benefits DEFENDER·N represents the philosophy of preserving and protecting assets. The more an object is maintained in its optimal state- the better. Surface protection reduces the consumption of water and detergents in the cleaning process.



Easy to apply



No protective equipment or complicated curing and drying processes are required. It's fast and simple.

Economic



The application and cost are low: a medium-sized car can be protected in 15-20 minutes and costs between 8 and 10 dollars.

Ecological



Water based product. No odors or vapors. The elements are natural and are not dangerous or flammable.

Resistant



The invisible layer protects against water, high temperatures up to 550°F (300°C), acids, and UV radiation.



DEFENDER·N

Smart technology to protect

defendern.com